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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,826	08/08/2001	Yasuyuki Ohira	Hiroe 98-1488-D	3513
23413	7590	03/03/2004	EXAMINER	
CANTOR COLBURN, LLP			FULLER, ERIC B	
55 GRIFFIN ROAD SOUTH			ART UNIT	
BLOOMFIELD, CT 06002			PAPER NUMBER	
			1762	

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,826

Applicant(s)

OHIRA ET AL.

Examiner

Eric B Fuller

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 12, 17-19, 21-27, and 29-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Kang et al. (US 4,602,054).

Kang teaches a composition for a tire that uses 100 parts natural rubbers or synthetic rubbers, such as polyisoprene (column 3, lines 25-37) with 10 parts MBT (column 3, lines 45-50). The material is formed into sheets and reinforced with fiber (column 1, lines 15-20). Tires read on being an energy conversion material since they heat up when subject to stresses from the road. Although the reference is silent in teaching that the energy conversion is due to dipoles being displaced, since the materials of the reference are the same as that of the claims, it must be inherent that the tires of Kang convert energy in this manner. Since the materials are the same, the tires must inherently absorb sound in the claimed frequency range as claimed by applicant. Claims 29-31 read on the tires heating up in the sun. The tires would possess all the absorbing attributes of claim 35.

Claims 1-6, 8-12, 17, 18, 21, 22, 25, 29-31, 33, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper (US 4,430,466).

Cooper teaches a composition for an impact resistant (energy conversion) tire that uses polyisoprene or acrylic rubber (column 2, lines 53-59) with DCHBSA as a vulcanization accelerator (column 4, lines 25-30). The tires comprise glass pieces as filler material within the applicant's compositional range (column 3, lines 1-25; column 5, lines 20-30). Although the reference is silent in teaching that the energy conversion is due to dipoles being displaced, since the materials of the reference are the same as that of the claims, it must be inherent that the tires of Cooper convert energy in this manner. Since the materials are the same, the tires must inherently absorb sound in the claimed frequency range as claimed by applicant. Claims 29-31 read on the tires heating up in the sun. The tires would possess all the absorbing attributes of claim 35.

Claims 1, 2, 4-8, 12-23, 25-27, and 29-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamijima et al. (US 5,439,512).

Kamijima teaches a composition for an anti-fouling paint that uses acrylic rubber (column 2, lines 50-68) with DCHBSA (column 9, line 32). The paint undergoes energy conversion when in use (column 1, lines 18-21). The paint comprises fillers (column 9, lines 65-68) and corrosion inhibitor (column 10, lines 10-43). The paint is applied by spraying (column 23, lines 10-15). Although the reference is silent in teaching that the energy conversion is due to dipoles being displaced, since the materials of the reference are the same as that of the claims, it must be inherent that the paint of

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Kamijima converts energy in this manner. Since the materials are the same, the paint must inherently absorb sound in the claimed frequency range as claimed by applicant. Claims 29-31 read on the paint heating up in the sun. The paint must inherently possess all the absorbing attributes of claim 35, since it is made of the same materials as the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kang et al. (US 4,602,054), as applied to claim 25 above, and in further view of Minatono et al. (US 4,218,349).

Kang teaches the limitations of claim 25 and teaches that the composition may be used in many different applications, such as hoses, belts and tires. The reference fails to explicitly teach that the composition is used in a shoe sole. However, Minatono teaches that belts, hoses, tires, and shoe soles all require vibration and impact absorption properties and that a composition used for tires will fulfill the absorption requirements for a shoe sole (column 1, lines 12-42). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the

composition taught by Kang as a shoe sole. By doing so, one would have a reasonable expectation of fulfilling the impact and vibration requirements for the shoe sole.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper (US 4,430,466), as applied to claim 25 above, and in further view of Minatono et al. (US 4,218,349).

Cooper teaches the limitations of claim 25. The reference fails to explicitly teach that the composition is used in a shoe sole. However, Minatono teaches that tires and shoe soles both require vibration and impact absorption properties and that a composition used for tires will fulfill the absorption requirements for a shoe sole (column 1, lines 12-42). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the composition taught by Cooper as a shoe sole. By doing so, one would have a reasonable expectation of fulfilling the impact and vibration requirements for the shoe sole.

Response to Arguments

Applicant argues that the Examiner inadvertently failed to take into consideration all of the claims to priority, thus disqualifying the art used in the previous action as prior art. Examiner agrees and has withdrawn the rejections accordingly. Applicant's arguments are moot in view of the new grounds of rejection.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Coran et al. (US 5,102,945) teaches a rubber/activator composition that, when cured, provides a low modulus and scorch rate.

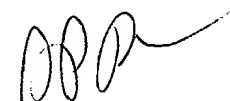
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B Fuller whose telephone number is (571) 272-1420. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck, can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EBF



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